Abstract

An Efficient Median Filter (EMF) algorithm for removal or enhancement of gray scale images are highly corrupted impulse noise is proposed in this paper. Noise in image are represent the pixel value 0's and 255's are ensures that black and white dot in image. In proposed algorithm take an image and select 3x3 size window and target or center pixel value check if its value is 0's or 255's then image is corrupted otherwise noise free image. If image is noisy and target pixels neighboring pixel value is between 0's and 255's then we replace pixel value with the median value and if target pixels neighboring pixel value is 0's or 255's then we replace pixel value with the mean value. Else increased the window size and again repeat this process until image is denoised. The proposed filter algorithm shows better simulation result as compare the existing algorithms. The simulation result shows better and efficient performance of PSNR and MSE and computation time.

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- An enhanced non linear Adaptive filtering technique for removing high density salt

Index Terms

Computer Science
Image Processing

Keywords

Impulse Noise  Digital Image  Median Filter  PSNR and MSE.